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EXAMINER

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**BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES**

Application Number: 10/663,574  
Filing Date: September 16, 2003  
Appellant(s): MARCU, GABRIEL G.

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Jaison C. John  
For Appellant

**EXAMINER'S ANSWER**

The examiners answer dated 12/26/07 is vacated and replaced with this examiners answer to clarify the rejection of claim 37, to consider the IDS filed 4/30/07, and to properly consider the reply brief dated 3/3/08.

**(1) Real Party in Interest**

A statement identifying by name the real party in interest is contained in the brief.

**(2) Related Appeals and Interferences**

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

**(3) Status of Claims**

The statement of the status of claims contained in the brief is correct.

**(4) Status of Amendments After Final**

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

**(5) Summary of Claimed Subject Matter**

The summary of claimed subject matter contained in the brief is correct.

**(6) Grounds of Rejection to be Reviewed on Appeal**

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

**(7) Claims Appendix**

The copy of the appealed claims contained in the Appendix to the brief is correct.

**(8) Evidence Relied Upon**

4764010	Bachmann	8-1988
5026998	Holzl	6-1991
5872623	Stabile	2-1999
4225241	Dankliker	9-1980
4480912	Snyder	11-1984

**(9) Grounds of Rejection**

The following ground(s) of rejection are applicable to the appealed claims:

**DETAILED ACTION**

***Response to Amendment***

The advisory action dated 1/30/06 has been withdrawn and the time period has been reset. This office action will examine the claims that were submitted with the after final amendment dated 9/14/06.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

**Claims 1-5, 8, 26, and 27 are rejected under 35 U.S.C. 102(b) as being anticipated by Bachmann (4764010).**

Referring to claims **1, 8, 26, and 27**, Bachmann shows an apparatus and a method of sending an optical signal from a first apparatus to a second apparatus based upon an incident angle (figure 3 and columns 1 and 2 and column 5 lines 5-20), a means for receiving a reflection of the optical signal from the second apparatus on a screen (column 4 line 30-50), and a means for adjusting a position of on apparatus relative to the other apparatus by adjusting the incident angle based upon the reflection (figure 3 and columns 1-3).

Referring to **claim 2**, Bachmann shows an optical source on the first apparatus (figure 3).

Referring to **claim 3**, Bachmann shows a method of directing the light a predetermined incident angle (column 5 line 5-20).

Referring to **claim 4**, Bachmann shows a second apparatus with a reflective material affixed upon it (figure 3).

Referring to **claim 5**, Bachmann shows a method for adjusting said incident angle (column 5 lines 5-20).

Referring to **claim 35**, Bachmann shows a first device that is a testing device (column 1 line 5-10).

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

**Claims 10-13 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bachmann (4764010) in view of Holzl (5026998).**

Referring to claim 10, Bachmann shows an apparatus and a method of sending an optical signal from a first apparatus to a second apparatus based upon an incident angle (figure 3 and columns 1 and 2 and column 5 lines 5-20), a means for receiving a reflection of the optical signal from the second apparatus on a screen (column 4 line 30-50), and a means for adjusting a position of on apparatus relative to the other apparatus by adjusting the incident angle based upon the reflection (figure 3 and columns 1-3). However Bachmann shows a screen that does not have a circuit to detect a position of the reflected light.

Holzl shows a screen that does have a circuit to detect a position of the reflected light (figure 1 Ref 7). It would have been obvious to modify Bachmann to include the circuit in Holzl because this allows the alignment process to be more automated with the use of electronics.

Referring to **claim 11**, Bachman shows a light receiving unit that comprises a screen (figure 3).

Referring to **claim 12**, Holzl shows a screen with a plurality of markings to provide a location on said screen upon which the reflective light is received (figures 1 and 2).

Referring to **claim 13**, Holzl shows a means for providing a signal that is indicative of said location on said screen upon which the reflected light is received (figure 1 Ref 7).

Referring to **claims 18**, Bachman shows a first apparatus that is a testing device (column 1 line 5-10).

Referring to **claims 22 and 23**, Bachmann shows a mirror affixed upon a second apparatus for providing the reflective light (figure 3).

Claim 19 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bachmann (4764010) in view of Holzl (5026998) as applied to claim 18 above, and further in view of Stabile (5872623).

Stabile shows a photometer and a radiometer (figure 1B Ref 205). It would have been obvious to further modify Walker to include the photometer and radiometer because radiant energy in the form of light needs to be measured to determine if the correct correlation between the first and second apparatuses is achieved.

**Claims 20, 21, 37-41, 44, and 45 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bachmann (4764010) in view of Holzl (5026998) and Dänkliker (4225241).**

Referring to claims 20, 21, 37-39, and 44, Dänkliker shows a second apparatus as a LCD screen that is well known that can be a computer screen (column 1 lines 34-

44). It would have been obvious to modify Bachmann to use a computer screen that is an LCD screen for the second apparatus because this device will measure the visual effects of changing the angle of incidence.

Referring to **claim 40**, Bachmann shows an apparatus and a method of sending an optical signal from a first apparatus to a second apparatus based upon an incident angle (figure 3 and columns 1 and 2 and column 5 lines 5-20), a means for receiving a reflection of the optical signal from the second apparatus on a screen (column 4 line 30-50), and a means for adjusting a position of on apparatus relative to the other apparatus by adjusting the incident angle based upon the reflection (figure 3 and columns 1-3).

Dankliker shows a second apparatus as a LCD screen that is well known that can be a computer screen (column 1 lines 34-44). It would have been obvious to modify Bachmann to use a computer screen that is an LCD screen for the second apparatus because this device will measure the visual effects of changing the angle of incidence.

Referring to **claim 41**, Bachman shows a screen to receive the reflective light (figure 3).

Referring to **claim 45**, Bachmann shows a reflective material affixed upon the second apparatus which if modified by Dankliker would be a computer display.

**Claims 28-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bachmann (4764010) in view of Snyder (4480912).**

Referring to **claim 28**, Bachmann shows an apparatus and a method of sending an optical signal from a first apparatus to a second apparatus based upon an incident



angle (figure 3 and columns 1 and 2 and column 5 lines 5-20), a means for receiving a reflection of the optical signal from the second apparatus on a screen (column 4 line 30-50), and a means for adjusting a position of on apparatus relative to the other apparatus by adjusting the incident angle based upon the reflection (figure 3 and columns 1-3).

However Bachmann does not show a plurality of marks on the screen.

Snyder shows a screen with a plurality of marks on the screen. It would be obvious that on the screen there would be a plurality of markings where the light is received to help with the alignment of the two objects.

Referring to **claim 29**, Bachmann shows a means for providing a light signal that is indicative of the location of the screen upon which the reflective light is received.

Referring to **claim 30**, Bachmann shows a reflective material affixed upon said second device (figure 3).

**Claim 36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bachmann (6154522) in view of Stabile (5872623).**

Referring to claim 36, Stabile shows a photometer and a radiometer (figure 1B Ref 205). It would have been obvious to further modify Bachmann to include the photometer and radiometer because radiant energy in the form of light needs to be measured to determine if the correct correlation between the first and second apparatuses is achieved.

**Claim 42 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bachmann (4764010) in view of Holzl (5026998) and Dänkliker (4225241) and Snyder (4480912).**

Bachmann shows an apparatus and a method of sending an optical signal from a first apparatus to a second apparatus based upon an incident angle (figure 3 and columns 1 and 2 and column 5 lines 5-20), a means for receiving a reflection of the optical signal from the second apparatus on a screen (column 4 line 30-50), and a means for adjusting a position of on apparatus relative to the other apparatus by adjusting the incident angle based upon the reflection (figure 3 and columns 1-3). However Bachmann does not show a plurality of marks on the screen.

Snyder shows a screen with a plurality of marks on the screen. It would be obvious that on the screen there would be a plurality of markings where the light is received to help with the alignment of the two objects.

**Claim 43 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bachmann (4764010) in view of Holzl (5026998) and Dänkliker (4225241) and Stabile (5872623).**

Stabile shows a photometer and a radiometer (figure 1B Ref 205). It would have been obvious to further modify Walker to include the photometer and radiometer because radiant energy in the form of light needs to be measured to determine if the correct correlation between the first and second apparatuses is achieved.

#### **(10) Response to Argument**

Referring to the rejection of claim 37, the subject matter of this claim was rejected under Bachmann (4764010) in view of Holzl (5026998) and Dänkliker (4225241) and this rejection was included in the final rejection however due to a clerical error the numeral of claim 37 was omitted. This supplemental examiners answer has

been written to clarify this clerical error, indicate the IDS filed 4/30/07 has been considered, and to properly respond to the reply brief dated 3/3/08.

Applicant's arguments filed 11/12/07 have been fully considered but they are not persuasive. Bachmann shows sending an optical signal from a first apparatus, which is a first bracket, to a second apparatus, which is a second bracket, based upon an incident angle (column 1 line 44 - 65 and column 5 line 5-20), incident being falling or striking something, as pertaining to light rays, any angle at which the optical signal from the first apparatus to the second apparatus would be incident. The argument that Bachmann does not show a first and second apparatus because these brackets are to be attached to a single member is blatantly incorrect. The two brackets are separate brackets therefor making them separate apparatus, and only after the alignment procedure as taught by Bachmann do the two separate brackets become attached to anything.

Bachmann also shows using a screen that receives a reflected angle of the optical signal from the second apparatus (column 4 line 32-65). The screen that Bachmann shows is noted as the "perforated disc". The reason for the perforation or mark on the disk is so the transmitted light can be sent through the disk and to have a mark to align the reflection with. Bachmann also shows adjusting a position of one of the apparatuses relative to the other by turning one of the brackets relative to the other until the reflection lines up with the perforation in the disk. (column 1 lines 44-65). Bachmann also teaches adjusting the incident angle, incident being falling or striking something, as pertaining to light rays, any angle at which the optical signal from the first

apparatus to the second apparatus would be incident (column 1 line 46-50). Therefore Bachmann does show each and every feature of the claimed invention.

Holzl shows "Thus in every position of measurement of the two shafts 1 and 2 the position detector produces two signals  $S_{sub.x}$  and  $S_{sub.y}$ , which correspond to the coordinates  $x$  and  $y$  of the point A of incidence of the light beam on the position detector 7 with respect to a reference point BP fixed in relation to the shaft" (column 4 lines 21-28). Holzl is referring to something call the Cartesian coordinate system when he says  $S_{sub.x}$  and  $S_{sub.y}$  which is used in general to describe a POSITION with respect to a origin =reference point BP". Holzl also explicitly teaches an opto-electronic position detector (column 4 line 48). Therefore Holzl shows a screen that produces two electrical signals and the corresponding circuitry. Furthermore it would be obvious to combine the screen that outputs the position of the light to automate the process taught by Bachmann.

Holzl shows the use of a photometer as described above, Stabile shows both a photometer and a radiometer which would be obvious to use because they detect light which is what Bachmann shows is the main factor in the alignment method disclosed.

Dandliker shows adjusting a relative positioning of a computer LCD screen and Bachmann shows adjusting the relative positioning of a first and second apparatus. These are similar art because they include the alignment and relative positioning of their respective apparatus using a transmitted light. It would further be obvious to position any apparatus using the methods disclosed by Bachmann because the method of

transmitting a signal and receiving a reflected signal on a screen is not apparatus dependent.

Snyder shows markings on the screen as shown in figure 11 and these markings are also taught by the perforation discussed in Bachmann. The art is analogous because they both deal with angular alignment.

Referring to the arguments dated 3/3/08:

Referring to the argument that Bachmann does not disclose any adjustment of an incident angle based upon the reflection having a reflected angle: Bachmann shows rotating the disk to alter the incident angle of the light onto the reflecting disk to adjust the reflection until the reflection reaches the aperture on the screen from which the light is emitted (column 4 line 39 and 40, column 1 line 44-65 and column 5 line 5-20).

Referring to the argument that the incident angle is not changed: the incident angle is the angle at which the light is incident to the reflector and therefore is inherently changed whenever the reflector is altered to change the position of the reflection on the screen which Bachmann does by rotating the disk.

Referring to the argument that Bachmann does not disclose a first and a second apparatus: The applicant clearly pointed out that there are two brackets disclosed by Bachmann, because there are two brackets there is a first and second apparatus.

Referring to the argument that Holzl does not disclose electronic circuitry: Holzl shows electronic signals from an opto-electronic position detector (column 4 line 48), these electronic signals can not be used without the use of circuitry. While Holzl does not paint the picture of traces along with electronic components it is inherent.

Referring to the argument that Holzl and Bachmann were not combined properly: When the original rejection was written the KSR case had not been decided however now in light of the KSR decision the examiner believes that the combination of Bachmann and Holzl would have been obvious because this is a combination of prior art elements according to known methods to yield predictable results.

Referring to the argument that Backmann and Dankliker are no combined properly: When the original rejection was written the KSR case had not been decided however now in light of the KSR decision the examiner believes that the combination of Bachmann and Kankliker would be obvious because this is a combination of prior art elements according to known methods to yield predictable results. Backmann and Dankliker both show a system to align a first and second apparatus. The Dankliker reference was cited to show that it is common to align screens such as a computer or TV LCD screen.

**(11) Related Proceeding(s) Appendix**

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

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/Thomas H. Tarcza/

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